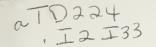
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Do not assume content reflects current scientific knowledge, policies, or practices.







United States Department of Agriculture

Soil Conservation Service

Boise, Idaho



# Idaho Water Supply Outlook

March 1, 1986



### **Foreward**

### How Forecasts Are Made

Most of the annual streamflow in the Western United States originates as snowfall. This snowfall accumulates high in the mountains during winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when it melts. Predictions are based on careful measurements of snow water equivalent at selected index points. Precipitation, temperature, soil moisture and antecedent streamflow data are viewed in conjunction with snowpack data to prepare runoff forecasts. This report presents a comprehensive picture of water supply outlook conditions for areas dependent upon surface runoff. It includes selected streamflow forecasts, summarized snowpack and precipitation data, reservoir storage data and narratives describing current conditions.

Streamflow forecasts are cooperatively generated by Soil Conservation Service and National Weather Service hydrologists. Forecasts become more accurate as more data affecting runoff becomes known. For this reason, forecasts are issued that reflect three future precipitation conditions — Below Normal, Average, and Above Normal. These forecasts are termed reasonable minimum, most probable, and reasonable maximum. Actual streamflow can be expected to fall between the lower and upper forecast values eight out of ten years.

Snowpack data are obtained by using a combination of manual and automated measurement methods. Manual readings of snow depth and water equivalent are taken at locations called snow courses on a monthly or semi-monthly schedule during the winter. In addition, snow water equivalent, precipitation, temperature, and other parameters are monitored on a daily basis and transmitted via radio telemetry to central data collection facilities. Both monthly and daily data are used to project snowmelt runoff.

#### For More Information

Copies of Monthly Water Supply Outlook Reports and other reports may be obtained from the states listed below. Because of the limited space, snow survey measurements are not published in monthly reports. An annual snow survey data summary is published by the Soil Conservation Service for each of the western states. Historical snow survey data may be obtained at those same offices.

STATE ADDRESS

Alaska 201 East 9th Ave., Suite 300, Anchorage, AK 99501-3687

Arizona 201 East Indianola, Suite 200, Phoenix, AZ 85012

Colorado 2490 West 26th Ave., Denver, CO 80211

(New Mexico)

Idaho 304 North 8th Street, Room 345, Boise, ID 83702

Montana 10 East Babcock, Room 443, Federal Building, Bozeman, MT 59715

Nevada 50 South Virginia Street, Third Floor, Reno, NV 89505

Oregon 1220 Southwest 3rd Ave., 16th Floor, Portland, OR 97204

Utah 4402 Federal Building, 125 South State Street, Salt Lake City, UT 84147

Washington 360 U.S. Court House, Spokane, WA 99201

Wyoming Federal Building, 100 East "B" Street, Casper, WY 82602

In addition to state reports, a Water Supply Outlook for the Western United States is published by the Soil Conservation Service and National Weather Service monthly, January through May. Reports may be obtained from the Soil Conservation Service, West National Technical Center, 511 Northwest Broadway, Room 547, Portland, OR 97209.

Published by other agencies:

Water Supply Outlook Reports prepared by other agencies include: California — Snow Survey Branch, California Department of Water Resources, P.O. Box 388, Sacramento, CA 98502; British Columbia — The Ministry of Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia, V8V 1X5; Yukon Territory — Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory, Y1A 3V1; Alberta, Saskatchewan, and N.W.T. — The Water Survey of Canada, Inland Waters Branch, 110-12 Avenue S.W., Calgary, Alberta, T3C 1A6.

### Idaho Water Supply Outlook

and

Federal — State — Private Cooperative Snow Surveys

### Issued by

Wilson Scaling Chief Soil Conservation Service Washington, D.C.

### Released by

Stanley N. Hobson State Conservationist Soil Conservation Service Boise, Idaho

### Prepared by

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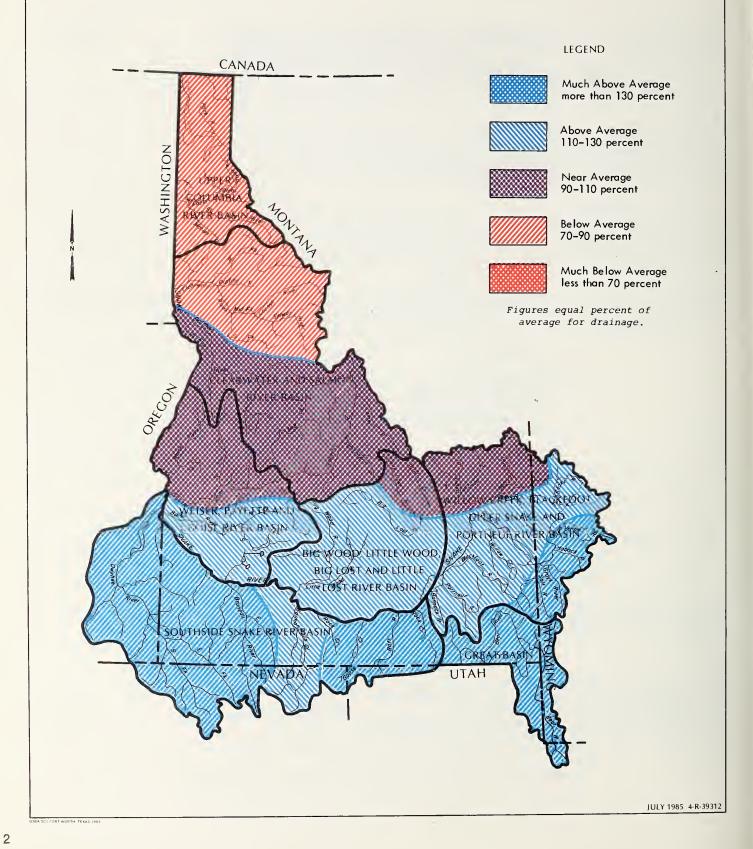
### In cooperation with

A. Kenneth Dunn Director State of Idaho Department of Water Resources Boise, Idaho

<sup>&</sup>quot;Programs and assistance of the United States Department of Agriculture are available without regard to race, creed, color, sex, age, or national origin."

### STREAMFLOW PROSPECTS **IDAHO**

100 MI 50 100 150 KM



### GENERAL OUTLOOK

#### SUMMARY:

A SERIES OF INTENSE WINTER STORMS PASSED THROUGH IDAHO DURING FEBRUARY BRINGING ENOUGH MOISTURE TO CAUSE MAJOR SNOWPACK INCREASES ACROSS THE SOUTHERN HALF OF THE STATE. SNOWPACKS ARE NOW ABOVE TO WELL ABOVE NORMAL THROUGHOUT CENTRAL AND SOUTHERN IDAHO. NORTHERN IDAHO SNOWPACKS REMAIN BELOW NORMAL. NEAR NORMAL FLOWS ARE EXPECTED ACROSS SOUTHERN IDAHO AND BELOW NORMAL FLOWS ARE EXPECTED IN THE PANHANDLE AREA OF NORTHERN IDAHO.

### SNOWPACK:

The March 1 snow surveys show snow accumulation during February was near to above average in the northern half of the state and much above average in southern Idaho, Snowpacks from the Clearwater basin northward showed slight to moderate improvement during the month, but remain below normal, ranging from 70% of normal on the Priest River drainage to 87% of normal on the Lochsa. One exception to this is in the Moscow Mountain area near Moscow where the snowpack is 115% of average. The Beaver-Camas drainage east of Dubois also reports below normal snowpack conditions at only 79% of average. The reremainder of the state reports near to well above normal snowpack conditions, ranging from 97% of normal on the Weiser to 170% of normal on the Montpelier Creek drainage in southeastern Idaho. Heavy precipitation in the form of rain, and mild temperatures during February dissipated most of the valley snowpacks. Higher elevation packs showed little or no melt during February 12-24 storm period, Packs throughout all elevations are now warmed and are near melt stage. Continued mild temperatures will result in much earlier than normal snowmelt and runoff.

#### PRECIPITATION:

A strong moisture laden southwesterly flow prevailed over Idaho during much of February. This storm track brought in a series of storms that dumped extremely heavy amounts of rain and snow over the state. For some areas it was the most precipitation ever recorded in February. The entire state had above normal totals with most in the 300 to 400 percent of normal range. Twin Falls was over 500 percent of The northern areas of Idaho received the normal. least amount of precipitation, while the Southcentral and Southwest observed the largest totals. Temperatures were mild for February. All sections of the state averaged well above normal. Record highs were observed during the last week of the month with some valley readings into the low 70s.

#### RESERVOIRS:

Above normal streamflow conditions resulting from the heavy precipitation during February has improved reservoir carryover storage in most reservoirs. Carryover storage is now at 106% of normal in 20 key reservoirs across the state, with most reservoirs reporting between 85% and 130% of average. Salmon Falls Creek reservoir reports the highest carryover storage at 218% of normal. Lucky Peak reservoir remains nearly empty for construction purposes and reports only 10% of normal storage.

#### STREAMFLOW:

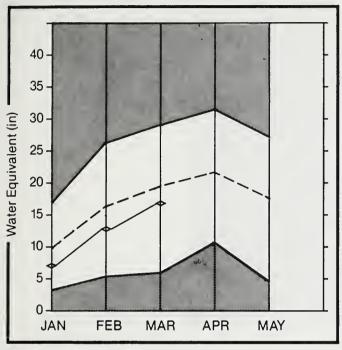
With the exception of watersheds in extreme northern Idaho, March-July and April-July seasonal volume forecasts have generally been increased 15 to 35% from those made near the first of February. highest increases occurred in the southern and southeastern part of the state. Forecasts on watersheds north of the Clearwater basin remained unchanged or have decreased slightly and currently range from 70% of normal on the St. Joe at Calder to 79% of normal for the Priest River near Priest River. The Clearwater at Orofino is now forecasted at 85% of normal for the April-July period, a 15% increase from the February 1 forecast for the same runoff period. The rest of the state is expected to have near normal to well above normal April-July streamflows, ranging from 100% of average for the Henry's Fork at Ashton to 145% on Montpelier Creek near Montpelier. Depending on precipitation and temperature conditions during the runoff period, peak flows could be high in some southern and southeastern watersheds. Residents in flood potential areas across southern and southeastern Idaho should monitor weather and runoff conditions and be prepared to take appropriate action.

#### SOIL MOISTURE:

In general, lower elevation soil profiles are very wet and near water holding capacity as of March 1 due to the heavy precipitation and snowmelt that occurred during February. Middle and higher elevation soil moisture conditions show some improvements since the first of February, but remain near or below normal.

### Upper Columbia Basin

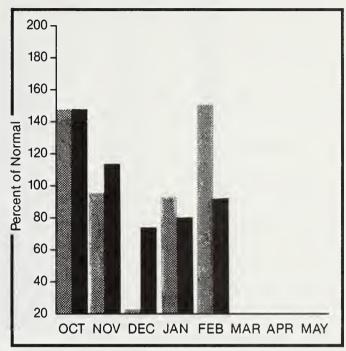
### Mountain snowpack\* (inches)



\*Based on selected stations



### Precipitation\* (percent of normal)



\*Based on selected stations



### WATER SUPPLY OUTLOOK:

Although most valley snow cover has dissipated with warmer temperatures during February, the March 1 snow surveys show mountain snowpack conditions continued to improve slightly during the month. Snowpack conditions remain below normal, but now range from 73 to 78% of average over most of the basin. April-July streamflows are forecast to be below normal, ranging from 70% to 79% of normal.

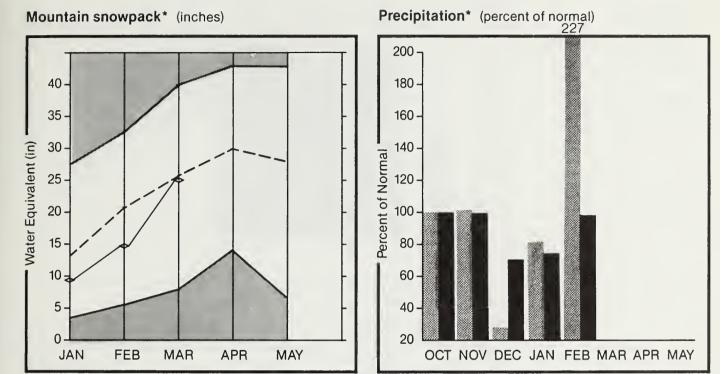
#### UPPER COLUMBIA RIVER BASIN

FORECAST POINT	FORECAST PERIOD	AVE.	MOST FROBABLE (1000AF)	MOST PROBABLE (% AVE.)	REAS. MAX. (% AUE.)	REAS: MIN: (% AVE.)	PEAK FLOW (CFS)	PÉAK DATE	LOH FLOH (CFS)	LOH
KOOTENAI at Leonia *	APR-SEP	8602.0	7810.0	90	112	. 70				
	APR-JUL	7498.0	6810.0	90	112	70				
	AFR-JUN	6051.0	5423.0	89	111	69				
LARK FORK at White Horse Rapids *	APR-SEP	13575.0	11400.0	83	103	65				
•	APR-JUL	12351.0	10400.0	. 84	103	65				
	AFR-JUN	10570.0	8915.0	84	103	65				
END OREILLE LAKE inflow *	APR-SEP	15150.0	12400.0	81	101	63				
	APR-JUL	13875.0	11300.0	81	100	62				
	APR-JUN	12010.0	9970.0	83	102	64				
RIEST RIVER at Priest *	APR-SEP	885.0	700.0	79	111	47				
	AFR-JUL	832.0	660.0	79	111	47				
FOKANE at Post Falls *	APR-SEP	2848.0	2000.0	70	103	37				
	AFR-JUL	2754.0	1930.0	70	103	37				
T. JOE at Calder	APR-SEP	1294.0	902.0	69	93	47				
	AFR-JUL	1225.1	869.0	70	94	48				
OEUR D' ALENE at Enaville	APR-SEP	844.2	650.0	76	115	39				
Section of Entranse	APR-JUL	804.8	624.0	77	116	40				

•	RESERVOIR STORAGE		(1000AF)		I HATERSHED SN	омраск ам	ALYSIS	
RESERVOIR	USEABLE   CAPACITY  	** US THIS YEAR	EABLE STOI LAST YEAR	RAGE **	     Watershed 	NO. COURSES AVE.D		YEAR AS % OF
HUNGRY HORSE	3451.0	2281.0	2007.0	2213.0	Kootenai ab Bonners Ferry	55	80	77
FLATHEAD LAKE	1791.0	812.5	746.8	934.1	Fend Oreille River	158	87	84
PEND OREILLE	1155.1	429.4	569.9	375.1	Clark Fork River	103	92	86
NOXON RAPIDS	335.0	162.8	316.5	295.1	Priest River	5	63	77
COEUR D'ALENE	225.1	283.0	19.5	142.8	l Rathdrom Creek	1	82	85
PRIEST LAKE	72.0	7.0	ain sip an	w-w/w.	l Hayden Läke	4	52	81
					1.   Coeur d'Alene River	8	67	78
				4 - 24	l   St. Joe Fiver	5	69	73
					l I Spokane River	17	65	76
					   Palouse River 	3	71	115

<sup>\*</sup>Corrected for upstream diversions or changes in reservoir storage. Average is for 1961–80 period.

### Clearwater and Salmon River Basin



### \*Based on selected stations

Maximum Average ———

Minimum Current ←

\*Based on selected stations

Monthly precipitation

Year to date precipitation

### WATER SUPPLY OUTLOOK:

Snow measurements taken near March 1 indicate snow-pack conditions have improved significantly over the entire basin with the greatest improvement being shown on the tributaries of the Salmon River above Salmon. Snowpack conditions now range from 81% of average on the N. Fork of the Clearwater River to 122% of average on the Lemhi drainage. April-July streamflows are now expected to range from 85% of normal on the Clearwater at Orofino to 105% on the Salmon above Salmon.

#### CLEARWATER AND SALMON RIVER BASIN

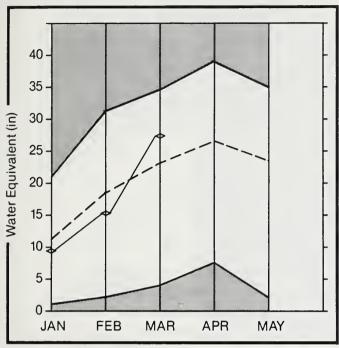
FORECAST POINT	FORECAST PERIOD	20 YR. AVE. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVE.)	REAS. MAX. (% AVE.)	REAS. MIN. (% AVE.)	PEAK FLON (CFS)	DATE	LOH FLOH (CFS)	DATE
EARWATER at Orofino	APR-SEP	5185.0	4430.0	85	109	61				
	APR-JUL	4917.0	4180.0	85	109	61				
EARWATER at Spalding	APR-SEP	8460.0	7220.0	85	107	63				
	APR-JUL	8000.0	6800.0	85	107	63				
ORSHAK RESERVOIR inflow	APR-SEP	2985.0	2540.0	85	104	66				
	APR-JUL	2805.0	2410.0	85	105	67				
LMON at Whitebird	APR-SEP	6876.0	7220.0	105	123	87				
	APR-JUL	6211.0	6520.0	104	123	87				
LMON at Salmon	APR-SEP	1053.0	1150.0	109	149	69				
	APR-JUL	899.0	985.0	109	150	70				

	PESERVOIR STORAGE		(1000AF)	! !	<u>H</u> ATERSHED	SNOWPACK ANALYSIS				
RESERVOIR	USEABLE I CAPACITYI I	THIS		1 GE **   I AVE.	WATERSHED	NO. COURSES AVE.D		EAR AS % OF		
DHORSHAK	2016.0		1065.2		Morth Fork Clearwater	11	79	81		
			and the second s		Lochsa Fiver	4	94	87		
					Selway River	3	96	86		
				į	Clearwater River	16	85	83		
				1	Salmon River ab Salmon	10	143	120		
				i	Lemhi River	7	140	122		
					Salmon River Total	27	124	111		

<sup>\*</sup>Corrected for upstream diversions or changes in reservoir storage. Average is for 1961-80 period.

### Weiser, Payette, and Boise River Basin

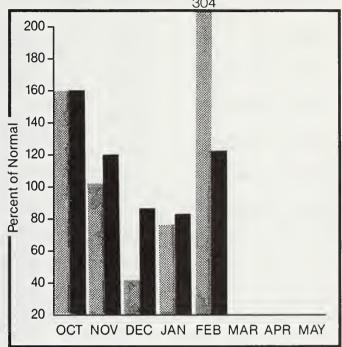








### Precipitation\* (percent of normal)



\*Based on selected stations



Year to date precipitation

### WATER SUPPLY OUTLOOK:

Well above normal precipitation amounts fell over the basin during February bringing much improved snowpack conditions as of March 1. Snowpack conditions now range from 91% of average on the Mann Creek watershed north of Weiser to 130% of average on the Boise River drainage. April-July streamflow forecasts have been increased to reflect the improved snowpack conditions, and now range from 85% of average on the Weiser nr Weiser to 127% on the S. Fork Boise River.

### WEISER, PAYETTE AND BOISE RIVER BASIN

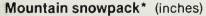
CTDCAMEL	011	FORFCASTS	

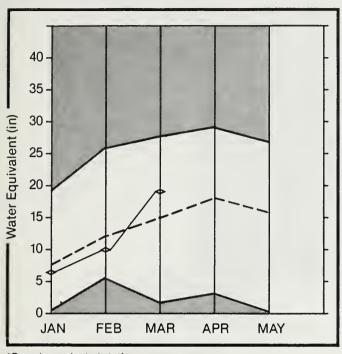
FORECAST POINT	FORECAST PERIOD	20 YR. AVE. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVE.)		REAS: MIN. (% AVE.)	PEAK FLOH (CFS)	PEAK DATE	LOH FLOH (CFS)	LOH DATE
				3300						
ÆISER nr Weiser	APR-SEP	427.0	363.0	85	120	50				
	AFR-JUL	399.0	339.0	84	120	50				
AYETTE or Horseshoe	APR-SEP	1817.0	1960.0	107	129	87				
	APR-JUL	1678.0	1810.0	107	129	87				
F PAYETTE at Cascade	APR-SEP	553.4	580.0	104	124	86				
	APR-JUL	517.8	540.0	104	124	86				
VF PAYETTE or Banks	APR-SEP	712.4	725.0	101	126	78				
	APR-JUL	671.4	685.0	102	126	78				
SF PAYETTE at Lowman	AP'R-SEF	497.2	550.0	110	132	90				
	APR-JUL	440.6	485.0	110	131	89				
DEADWOOD RESERVOIR inflow	APR-JUL	140.0	155.0	111	131	89				
BOISE RIVER or Twin Springs	APR-SEP	705.4	867.0	122	144	102				
-	APR-JUL	650.0	800.0	123	144	102				
SF BOISE at Anderson Dam	APR-SEP	589.5	750.0	127	147	107				
	APR-JUL	551.3	700.0	126	147	107				
BOISE RIVER or Boise	APR-SEP	1571.4	1965.0	125	146	104				
	APR-JUL	1454.4	1820.0	125	146	104				
	APR-JUN	1279.4	1615.0	126	147	105				

RES	ERVOIR STORAGE		(1000AF)	 	I WATERSHED SMOWPACK ANALYSIS						
RESERVOIR	USEABLE   CAPACITY  		ABLE STOF LAST YEAR	AVE+ I	MATERSHED	NO. COURSES AVE.D			AS % OF		
MANN CREEK	11.1	7.4	4.0		Mann Creek	4	86		91		
CASCADE	653.2	415.0	395.4	332.1	Weiser River	9	97		97		
DEADWOOD	161.9	84.7	111.4	79.5	North Fork Payette	9	106		105		
ANDERSON RANCH	423.2	262.7	265.2	234.8	South Fork Payette	6	117		113		
ARROWROCK	286.6	247.8	212.4	250.2	Payette River Total	15	110		108		
LUCKY PEAK	278.2	7.9	24.1	81.9	Middle & North Fork Boise	8	145		130		
LAKE LOWELL (DEER FLAT)	169.0	139.2	/ 124.1	126.8	South Fork Boise River	10	137		130		
					Boise River Total	19	129		126		
				1	Canyon Creek	3	95		118:		

<sup>\*</sup>Corrected for upstream diversions or changes in reservoir storage. Average is for 1961-80 period.

## Big Wood, Little Wood, Big Lost, and Little Lost River Basin

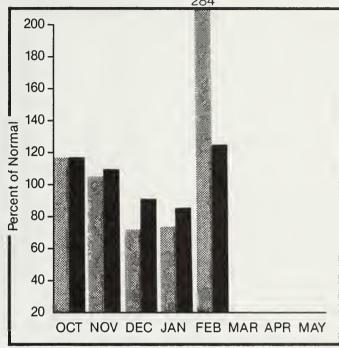




\*Based on selected stations



Precipitation\* (percent of normal)



\*Based on selected stations



### WATER SUPPLY OUTLOOK:

Heavy precipitation over the basin during February pushed snowpack conditions to well above average over most of the basin. Snowpack conditions as of March 1 are reported to range from 116% of normal on the Little Lost River watershed to 153% on the Fish Creek drainage. April-July streamflow forecasts have been increased significantly and now range from 105% of average on Little Lost near Howe to 130% on the Little Wood River near Carey.

### BIG WOOD, LITTLE WOOD, BIG LOST AND LITTLE LOST RIVER BASIN

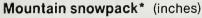
FORECAST FOINT	FORECAST	20 YR. AVE.	MOST PROBABLE	MOST PROBABLE	REAS.	REAS.	PEAK FLOW	PEAK	LOM FLOM	ΓOń
	PERIOD		(1000AF)					DATE	(CFS)	DATE
DTO HOOD 0-11	400.050	400.0	040.0	404						
BIG WOOD or Bellevue	AFR-SEF AFR-JUL	193.3 179.8	240.0	124 125	150 151	98 99				
MAGIC RESERVOIR inflow	APR-SEP	307.0	383.0	124	168	82				
	APR-JUL	293.0	366.0	124	168	82				
LITTLE WOOD or Carey	AFR-SEP	100.9	131.0	129	159	100				
	AFR-JUL	93.1	121.0	129	160	100				
BIG LOST at Howell Ranch	APR-SEP	211.2	265.0	125	160	91				
	APR-JUL	186.1	232.0	124	158	91				
	APR-JUN	144.4	185.0	128	162	94				
BIG LOST or Mackay	APR-SEP	183.7	227.0	123	161	87				
LITTLE LOST bl Wet Ck	APR-SEP	38.7	40.7	104	142	67				
	APR-JUL	31.3	32.9	104	143	67				
LITTLE LOST or Howe	APR-SEP	42.2	44.3	104	140	71				
	AFR-JUL	32.5	34.2	105	141	71				

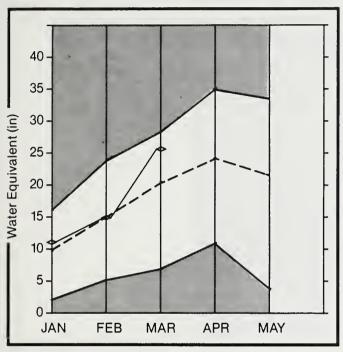
RES	SERVOIR STORAGE	(1000AF)	     	HATERSHE	D SNOWPACK AN	ALYSIS	
RESERVOIR	USEABLE   *> CAPACITY! TH:   YEA		 AGE **       AVE,	WATERSHED	NO. COURSES AVE.D		YEAR AS % OF
MAGIC	191.5 14	7.4 148.8	96.6	Big Wood ab Magic	8	157	133
LITTLE WOOD	30.0 2:	1.4 26.8	16.7	Camas Creek	5	113	126
CAREY VALLEY	МО	REPORT		Big Wood Total	12	140	130
MACKAY	44.2 3:	1.5 37.2	31.5	Little Wood River	4	163	139
			l	Fish Creek	3	164	153
				Big Lost River	9	167	134
				Little Lost River	3	143	116

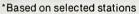
<sup>\*</sup>Corrected for upstream diversions or changes in reservoir storage.

Average is for 1961-80 period.

# Willow Creek, Blackfoot, Upper Snake, and Portneuf River Basin

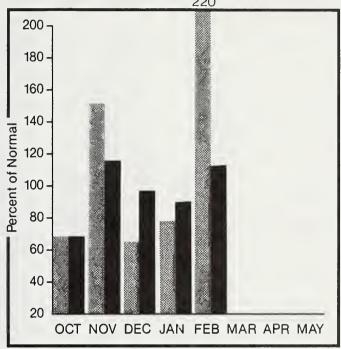








### Precipitation\* (percent of normal) 220



\*Based on selected stations

Monthly precipitation Yea

Year to date precipitation

### WATER SUPPLY OUTLOOK:

Snowpack conditions improved significantly during February over much of the basin with the greatest increase reported in the Upper Snake River basin above Palisades Reservoir. Snowpacks now range from 112% to 141% of normal throughout the basin. The exception is the Beaver-Camas Creek watershed east of Dubois, which reports only 79% of normal snowpack. April-July streamflows are now forecasted to be near or above normal, ranging from 100% to 144% of average.

#### WILLOW CREEK, BLACKFOOT, UPPER SNAKE AND PORTNEUF RIVER BASIN

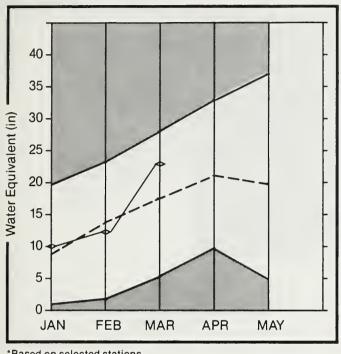
FORECAST POINT	FORECAST PERIOD	AVE.	MOST PROBABLE (1000AF)			REAS: MIN: (% AVE.)	PEAK FLOW (CFS)	PEAK DATE	LOH FLOH (CFS)	LOH DATE
HENRY'S FORK or Ashton *	APR-SEP	714.0	715.0	100	110	90				
is the state of th	APR-JUL	529 - 1	530.0	100	114	90				
HENRYS FORK or Rexburg *	APR-SEP	1474.7	1610.0	109	127	91				
·	APE-JUL	1153.3	1260.0	109	127	<b>91</b>				
ALLS RIVER or Squirrel	APR-JUL	366.0	399.0	109	123	95				
ETON PIVER ab S Leigh Ck	APR-SEP	193.9	222.0	114	128	101				
	APR-JUL	145.0	168.0	115	130	102				
ETON or St. Anthony	APR-SEP	465.0	540.0	116	131	102				
	APR-JUL	375.0	435.0	116	131	102				
SNAKE at Moran *	APR-SEP	880.0	1070.0	121	138	106				
ALISADES LAKE inflow *	APR-SEP	3793.0	4740.0	125	144	106				
SNAKE or Heise *	APR-SEP	4066.5	5080.0	125	148	102				
	AFR-JUL	3464.8	4330.0	124	149	101				
SNAKE or Blackfoot *	AFR-SEP	5537.0	6580.0	118	142	96 ,				
	AFR-JUL	4465.0	5360.0	120	143	97				
PORTNEUF at Topaz	MAR-SEP	102.0	117.0	114	151	78				
	MAR-JUL	82.1	94.3	114	151	79				

	RESERVOIR STORAGE		(1000AF)	i I	I WATERSHED SNOWPACK AMALYSIS						
PEOSEMOTE	USEABLE I			RAGE **	HATEROUED	NO.	THIS	YEAR AS % OF			
RESERVOIR	CAPACITY!	THIS YEAF	LAST YEAR	AVE.	WATERSHED	COURSES AVE↓D	LAST	YR. AVERAGE			
ISLAND PARK	127.0	95.5	94.2	109.7	Camas-Beaver Creeks	2	105	88			
GRASSY LAKE	15.1	12.9	13.1	10.4	Henrys Fork River	14	122	113			
JACKSON LAKE	624.4	148.8	274,8	553.0	Teton River	9	133	128			
PALISADES	1200.0	911.4	888.5	851.0	Snake above Palisades	29	152	133			
AMERICAN FALLS	1673.0	1094.9	1285.0	1269.0	Snake above Jackson Lake	e 8	135	129			
BROWNLEE	980.2	895.8	464.2	495.5	Gros Ventre River	3	169	141			
				1	Greys River	4	166	128			
				į	Salt River	5	152	135			
					Millow Creek	9	119	128			
				İ	Blackfoot River	4	146	141			
					Portneuf River	3	125	120			
				1	Toponce Creek	0	0	0			

<sup>\*</sup>Corrected for upstream diversions or changes in reservoir storage. Average is for 1961-80 period.

### Southside Snake River Basin

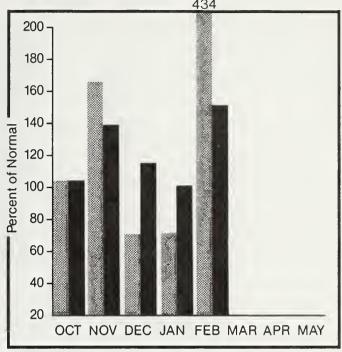
### Mountain snowpack\* (inches)



\*Based on selected stations



Precipitation\* (percent of normal)



\*Based on selected stations



### WATER SUPPLY OUTLOOK:

Heavy precipitation in the form of rain during February dissipated much of the snowpack below the 5500 ft. level but substantially increased snowpacks above this elevation. Snowpack conditions now range from 120% of normal on Salmon Falls Creek to 149% on Goose-Trapper Creeks. March-July volume forecasts have been increased 25 to 35% from those published last month, and now range from 120% of normal on Salmon Falls Creek near San Jacinto to 140% on the Inflow to Oakley Reservoir.

### SOUTHSIDE SNAKE RIVER BASIN

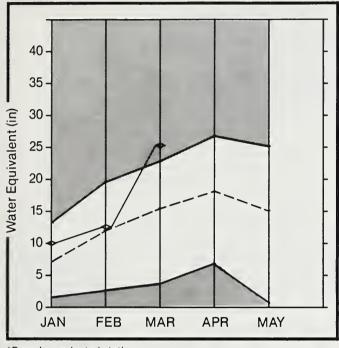
FORECAST POINT	FORECAST	20 YR. AVE.	MOST PROBABLE	MOST PROBABLE	REAS.	REAS. MIN.	PEAK FLO	ΡΈΑΚ	LOM FLOM	FOH
TONEONOT TOTAL	PERIOD	(1000AF)		(% AVE.)	(% AVE.)	(% AVE.)	(CFS)	DATE	(CFS)	DATE
				1.73						
AKLEY RESERVOIR inflow	APR-SEP	30.2	40.8	135	172	7.46 99-				
	APR-JUL	27.2	36.7	134	173	99				
ALMON FALLS CK or San Jacinto	MAR-SEP	93.9	114.0	121	162	81				
	MAR:-JUL	89.3	107.0	119	160	79				
	MAR-JUN	84.3	102.0	120	161	81				
RUNEAU or Hot Spring	MAR-SEP	243.3	316.0	129	171	89				
	MAR-JUL	231.5	300.0	129	171	89				
WYHEE RIVER or Gold Creek *	APR-JUL	22.0	32.0	145	200	91				
WYHEE RIVER or Owyhee *	APR-JUL	85.4	110.0	128	181	76				
WYHEE LAKE inflow *	APR-SEP	376.0	413.0	109	159	61				
	APR-JUL	349.0	383.0	109	159	61				
WYHEE at Rome *	APR-JUL	376.0	413.0	109	160	60				

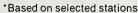
	RESERVOIR STORAGE	(1000AF)·			WATERSHED SNOWPACK AMALYSIS						
RESERVOIR	USEABLE   CAPACITY  	** USE THIS YEAR	ABLE STOR LAST YEAR	AGE ** 1 AGE ** 1 AVE 1	WATERSHED	NO. COURSES AVE.D		YEAR YE.	AS % OF		
OAKLEY	74.4	44.3	44.3	28.8	Raft River	8	150		131		
SALMON FALLS	182.6	108.7	135.2	49.9	Goose-Trapper Creeks	3	147		149		
OMAHEE	715.0	703.8	585.4	486.6	Salmon Falls Creek	11	116		120		
					Bruneau River	10	125		129		
				1	Owvhee River	20	126		146		

<sup>\*</sup>Corrected for upstream diversions or changes in reservoir storage. Average is for 1961-80 period.

### Great Basin

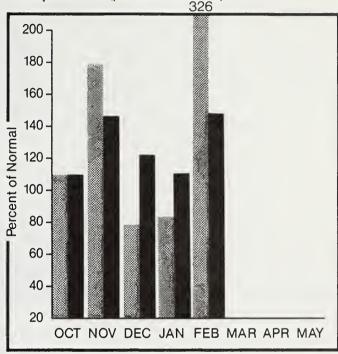
### Mountain snowpack\* (inches)



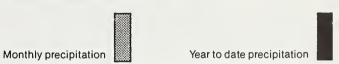




### **Precipitation\*** (percent of normal) 326



\*Based on selected stations



### WATER SUPPLY OUTLOOK:

Much above normal precipitation during February pushed snowpack conditions to well above normal over the entire basin. Many snow courses reported record high water contents for the first of March. Snowpack conditions now range from 136% of normal on the Cub River drainage to 171% of normal on the Montpelier Creek watershed. April-July streamflows are expected to be well above normal, ranging from 130 to 145% of average.

### GREAT BASIN

FORECAST POINT	FORECAST PERIOD	20 YR. AYE. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVE.)		REAS, MIN, (% AVE,)	PEAK FLOW (CFS)	PEAK DATE	LOH FLOH (CFS)	LOH DATE
BEAR at Harer	APR-SEP	310.0	419.0	135	163	111				
MONTPELIER CK nr Montpelier	APR-SEP	13.9	20.2	145	179	108				
CUB RIVER or Preston	APR-SEP APR-JUL	51.7 46.8	66.3	128 129	158 160	99 100				

	RESERVOIR STORAGE		(1000AF)	i 1 1	NATERSHED SNOWPACK ANALYSIS						
RESERVOIR	USEABLE 1 CAPACITYI I		EABLE STOF LAST YEAP	1 AGE **       AVE	HATERSHED	NO. COURSES AVE.D			AS % OF		
BEAR LAKE	1421.0	1089.0	1061.2	979.6	Bear Fiver (above Harer)	11	165		144		
MONTPELIER CREEK	4.0	1.8			Montpelier Creek	6	180		172		
					Mink Creek	6	167		153		
				i	Cub River	4	139		136		
				i i	Malad River	6	145		148		

<sup>\*</sup>Corrected for upstream diversions or changes in reservoir storage. Average is for 1961-80 period.

### OTHER INFORMATION

We have been making significant strides in the Snow Survey Program in the past few years, and we're most encouraged that this trend will continue.

Our progress has come in several forms. First, we improved our SNOTEL site performance system-wide, partly because of replacement parts, but also because of our increased employee understanding and capability. Secondly, we have significantly enhanced cooperator relationships, especially federal agency relationships. Thirdly, these relationships have resulted in an expanded SNOTEL system and upgrades to other sites. This expansion is in the Colorado drainage, but also impacts our system-wide functions. Fourth, SCS field offices have had indoctrination in the use of CFS (Centralized Forecast System) and the benefits of immediate availability of data through local computers. Last, we have succeeded in step one of our trek toward SNOTEL upgrade. This effort has gone through the budget hearings at both USDA, SCS, and OBM, and is a part of the President's budget request.

The President's office proposes to earmark 1 million dollars per year for each of 5 years for SNOTEL upgrade. We, in SCS, can be very proud of our snow survey program leaders for thoroughness, tenacity, and technical support developing the background information that has resulted in acceptance of the proposals through these levels. Well done folks. . .

Western State Conservationists have quite naturally maintained an intense interest in this program. have had an Ad Hoc Committee in place for several years with varying degrees of activity over time. The reorganization issue saw intimate involvement of this Ad Hoc Committee. Since then, and until recently, the Committee has not been so active. have decided, however, that this group, or more precisely, a sub-group of the Ad Hoc Committee review the progress of the reorganization efforts across the West. Should this group identify areas needing an extra push or fine tuning, we will make those recommendations to the Ad Hoc Committee for their consideration. This is a prudent and entirely appropriate activity in a major reorganization effort such as we initiated in snow surveys in 1982.

The result of the reorganization has unquestionably been to the benefit of our users, and we are just beginning. Just wait until we get computers in our field offices - how exciting - our future is as bright as the sun reflecting off a snow field.

Stan Gon

# The Following Organizations Cooperate With The Soil Conservation Service In Snow Survey Work

State

Idaho Department of Water Resources Oregon State Engineer and Corps of State Watermasters Soil and Water Conservation Districts of Idaho

Federal

U.S. Department of Agriculture Forest Service

U.S. Department of Army Corps of Engineers

U.S. Department of Commerce NOAA, National Weather Service

U.S. Department of Interior Bureau of Reclamation

Geological Survey, Water Resources Division

Shoshone-Bannock Tribal Council

Local

Big Lost River Irrigation District
Big Wood Irrigation Company
Boise Project Board of Control
Idaho Water District #01
Lewiston Orchards Irrigation District
Little Wood River Irrigation District
North Board of Control — Owyhee Project
Salmon Falls Creek Irrigation Company
South Board of Control — Owyhee Project

Private

Cyprus Mining Company
FMC Corporation
Idaho Power Company
Le Bois Resort
Washington Water Power Company

Other organizations and individuals furnish information for the snow survey reports. Their cooperation is gratefully acknowledged.

### UNITED STATES DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE

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